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**United States Foreign Military Sales Strategy: Coalition Building or  
Protecting the Defense Industrial Base**

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## **ABSTRACT**

**TITLE:** United States Foreign Military Sales Strategy: Coalition Building, Protecting the Defense Industrial Base, or Selling America's Security for Short Term Profits?

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Exporting American ideas, equipment, training and doctrine is nothing new and has numerous benefits for U.S. security interests. Two of the most recognizable benefits are U.S. access and influence. Since the end of the Cold War there has been an apparent shift in U.S. Government policy to sell more high-technology military equipment as opposed to the older, more obsolete, retired U.S. military equipment.

This paper analyzes this apparent shift in government policy from two view points. The first premise is based on the idea of burden-sharing or coalition building. Supporters of this premise stress the need to insure that our allies are capable of carrying their fair share of the load in any future conflict. Thus, for an ally to adequately carry his share of the load in future conflicts, he must be equipped with state-of-the-art, high technology military equipment that is compatible.

The second premise is that of preserving and protecting the U.S. defense industrial base. As U.S. defense spending continues its downward spiral, the Pentagon is unable to fully support its military industrial complex. Today, whether we like it or not, Foreign Military Sales procurements are the only purchases keeping many U.S. weapons production facilities open. Many feel that this is acceptable since the critical skills in the U.S. defense industrial base must be preserved and with reduced defense dollars, foreign military sales is the answer.

## **BIOGRAPHICAL SKETCH**

Lieutenant Colonel Michael N. Beard (M.S., University of Southern California) is a fighter pilot with over 1500 hours in the F-15 and A-10. He worked in the Pentagon in the office of the Deputy Under Secretary of the Air Force, International Affairs from January 1992 through June 1994. There he served as the Korea Country Director responsible for all Air Force foreign military sales (FMS) programs to Korea and later as the Chief, International Aircraft Programs responsible for the transfer of all Air Force excess defense equipment and managed all international Advanced Medium Range Air-to-Air Missile (AMRAAM) sales. During that period he worked many of the issues through the interagency process to release new-production equipment to FMS customers while preserving the U.S. qualitative advantage. He is a graduate of the Air War College, class of 1995.

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## **United States Foreign Military Sales Strategy: Coalition Building or Protecting the Defense Industrial Base**

*"I believe that it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or by outside pressures."*

- Harry S. Truman (excerpt from The Truman Doctrine)

### **Introduction**

Exporting American ideas, equipment, training and doctrine is nothing new and has numerous benefits for U.S. security interests. Two of the most recognizable benefits are U.S. access and influence, equating to real power - the epitome of realist theory - into various countries and regions. Decisions to sell military equipment overseas are evaluated based on whether the sale enhances U.S. security interests, its impact on regional stability and whether it strengthens international cooperation.

This paper will begin with a look at the foundation, or Legislative authority, for the conduct of U.S. Foreign Military Sales programs. With this background in mind, it will analyze an apparent shift in U.S. Government policy to sell more high-technology military equipment as opposed to the older, more obsolete, retired U.S. military equipment from two view points - coalition building and protecting the U.S. defense industrial base. Finally, it analyzes the increasing trend towards technology transfer, or an apparent "near-sightedness" by the U.S. defense contractors, to consummate a contract for near-term capital gain.

The first premise is based on the idea of burden-sharing or coalition building. Supporters of this premise stress the need to insure that our allies are capable of carrying their fair share of

the load in any future conflict. Thus, for an ally to adequately carry his share of the load, he must be equipped with the proper equipment.

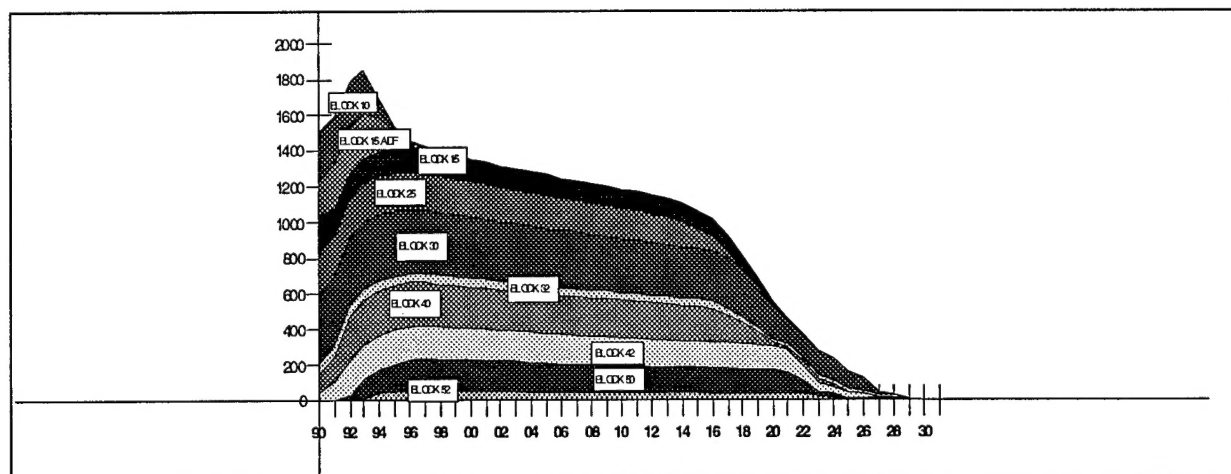
The second premise is that of preserving and protecting the U.S. defense industrial base. As U.S. defense spending continues its downward spiral, the Pentagon is unable to fully support its military industrial complex. Many feel that the critical skills in the U.S. defense industrial base must be preserved. On February 17, 1995, the Clinton Administration released a new Conventional Arms Transfer Policy statement that, for the first time, declares the continued well being of the defense industry as a decisive factor in approving specific weapons sales.<sup>1</sup> "People can say it's disgusting," a U.S. arms seller says, "but foreign arms sales provide jobs, help maintain the industrial base and, in a Machiavellian world, give us power and influence in international relations."<sup>2</sup> Since the United States is not buying as much defense equipment, we must sell overseas to maintain jobs at home and our technical know-how.

***Foreign Military Sales Policy Shift*** Since the end of the Cold War and the beginning of the defense draw-down, the United States government has increased its volume of Foreign Military Sales (FMS) cases throughout the world. In 1986, the United States exports accounted for only 13 percent of the world's arms exports while today the American share of the weapons market is an overwhelming 70 percent.<sup>3</sup> The most recent cases consist primarily of new-production, high-technology equipment that is often more advanced than the equipment possessed by U.S. forces. More advanced primarily because current production takes advantage of the latest technologies and incorporate numerous production enhancements, improvements, and manufacturing change proposals that the U.S. military needs to purchase separately as a



modification for the U.S. assets that were purchased in years past. Examples include the Block 52 F-16C aircraft purchased by South Korea in their Korean Fighter Program (KFP); the internally mounted Airborne Self Protection Jammer (ASPJ) for the F-16C purchased by Korea and the F/A-18 purchased by Finland; the M1-A2 tank purchased by Kuwait and Saudi Arabia; the AIM-120B Advanced Medium Range Air-to-Air Missile (AMRAAM) purchased by numerous NATO countries; the advanced Patriot Surface-to-Air missile system purchased by Kuwait, Saudi Arabia and Bahrain; and the AH-64 Apache attack helicopter purchased by Kuwait, Saudi Arabia and the United Arab Emirates.<sup>4</sup>

Specifically, the 120 Korean Fighter Program Block 52 F-16s are technologically superior to the majority of the USAF's F-16 fleet in numerous ways. First, it is totally night capable via a Low Altitude Navigation and Targeting Infra-Red Night (LANTIRN) subsystem -- only available on the USAF's Block 40 fleet with no plans to incorporate it on our own Block 50s.



**Figure 1** USAF F-16 Fleet Structure by Block Numbers.

Second, KFP jets contain the internally mounted Airborne Self Protection Jammer freeing all external weapons stations for actual weapons carriage. U.S. Air Force F-16s must carry external jamming pods that limit the aircraft's range, maneuverability, and weapons carriage capability. Third, KFP jets have the F100-PW-229 engine yielding more thrust than any other engine in the F-16 inventory. Only the USAF's Block 50 fleet carry this engine or the equivalent General Electric -129 motor. Fourth, the KFP jets are capable of carrying all the ordnance carried by USAF F-16s plus the HARPOON and SLAM anti-ship missiles -- not carried on USAF F-16s. Fifth, the KFP jets possess the global positioning system (GPS) and an advanced airborne identification friend or foe system (AIFF). Currently, USAF F-16s are being modified for the GPS but only a few will ever have an AIFF system. These are just a few of the enhancements incorporated on the KFP jets that have taken years and billions of dollars to develop. Many of these enhancements may never see service on U.S. aircraft or at best, on only a small portion of the United States fighter fleet.

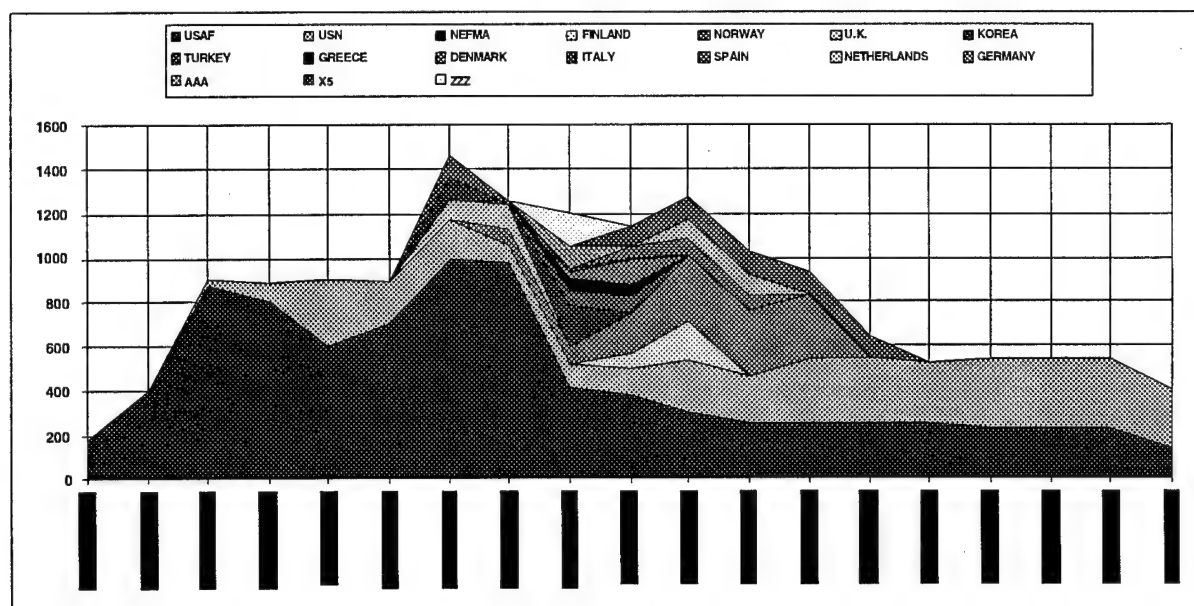
Of the more than 4500 AMRAAM's currently in the USAF inventory, only 32 percent are AIM-120B model missiles<sup>5</sup>. The majority of the USAF's AMRAAM inventory are the older, less capable AIM-120A missiles; whereas, all missiles purchased by Foreign Military Sales customers are the AIM-120B. Additionally, Norway has adapted the AMRAAM for use as a surface-to-air missile as well as an air-to-air missile. This dual use capability offers the Norwegian military tactical flexibility unlike any missile in the U.S. military. The U.S. Army is not interested in pursuing the AMRAAM as a surface-to-air missile.

***Importance of Foreign Military Sales to U.S. Security Interests*** Foreign Military Sales will become even more important to U.S. security interests in the future for several reasons. First, as we continue to downsize the U.S. military, both at home and abroad, we become more reliant on our allies and partners to assist in future crises. Our own concept of fighting and winning two near simultaneous major regional conflicts relies on the full participation of our allies.<sup>6</sup>

*Our first priority in foreign policy remains solidarity with our allies and friends. We have never been able to "go it alone," even in the early days of the Cold War when our major allies were still suffering from the devastation and exhaustion of World War II. Even to attempt to do so would alter our way of life and national institutions....The rise of other centers of power in the free world is therefore welcome....We are prepared to share more fully with our allies and friends the responsibilities of global leadership.*

*- National Security, Strategy of the United States  
The White House, March 1990*

Second, we can afford to reduce our forward presence overseas because of the access and influence that the United States maintains within regions. We have access, the ability to visit and use strategic areas, to many countries through our military -to-military contacts and our support of the weapons systems they have purchased from us. By influence, we mean that a country with our equipment must "play by our rules" or be cut-off from the logistical and technical support for a system. For instance, when Iran captured the U.S. Embassy in 1979, the United States cut-off the supply of parts to their HAWK missile batteries, F-14 aircraft, and other military systems. Additionally, in 1990 the United States halted exports of F-16s to Pakistan because of their refusal to abide by the Nuclear Non-Proliferation Treaty, but not before Islamabad may have secretly modified some their existing F-16s to deliver their handful of nuclear weapons. Today, Pakistan is still under an arms embargo from the United States, known



**Figure 2: Projected Future AMRAAM Sales**

as the Pressler Sanctions, of new acquisitions of U.S. military equipment. Currently, there are twenty-eight brand new Pakistani F-16s, bought and paid for, in the Air Force's Aircraft Maintenance and Reclamation Center (AMARC -- the bone yard) at Davis-Monthan AFB that cannot be delivered because of these Pressler Sanctions.<sup>7</sup>

Third, FMS is currently the lifeline of our defense industrial base. Foreign country acquisitions are currently keeping the F-15E production line open, and after 1997 all F-16 production will be for FMS countries. Even the future of our most advanced high-technology weapons production is dependent upon FMS. Beginning in FY 1996, FMS purchases will constitute over 60 percent of the Advanced Medium Range Air to Air Missile (AMRAAM) annual contracts.<sup>8</sup>

## **Statutory Authority for Foreign Military Sales**

*Historical Perspective* The export of U.S. military equipment to foreign governments is nothing new. In an attempt to avoid, or even delay America's entry into World War II, President Franklin D. Roosevelt first offered U.S. military equipment to the United Kingdom through his "Destroyers for Bases Deal" in September 1940. Later that year in his "Arsenal of Democracy" speech, FDR proposed a program whereby the United States would furnish necessary supplies, including food, machinery, military equipment, and services to its allies.

This proposal became the basis for Roosevelt's lend-lease program defined in his "Four Freedoms" State of the Union speech to Congress in January 1941.<sup>9</sup> Congress subsequently authorized the Lend-Lease Act (1941) empowering the president to sell, lend, lease, and transfer such material under whatever terms the President deemed proper. This lend-lease program was originally intended to aid Britain, the Commonwealth countries, and China.<sup>10</sup> By the war's end virtually all the Allies, including the USSR, were recipients under this Act. Between March and December 1941, Congress in three separate actions authorized a total of \$23 Billion in lend-lease. Lend-lease continued as a U.S. foreign policy tool through September 1946 authorizing a total investment of \$50.6 Billion during the five-year program.<sup>11</sup>

By 1947, it became obvious that Communist and capitalist ideologies would enter into hostile competition. The Soviet intention was to dominate and control as much of Europe as possible. The United States response centered around George Kennan's containment policy, as defined in "*the long telegram*," which argued that "the main element of any United States policy toward the Soviet Union must be that of long-term, patient but firm and vigilant containment of Russian expansive tendencies."<sup>12</sup> This policy became the foundation for the Truman Doctrine

first presented in a speech to Congress on March 12, 1947. The Truman Doctrine committed the United States to contain Communism throughout the world by aiding countries that requested help against Soviet expansionism. Its first test came in 1947 when the United States granted \$400 million to Greece and Turkey to fight the Communist insurgency.<sup>13</sup> This began the great arms race and international weapons sales competition.

*Cold War/Current Legislative Guidance* Today, Foreign Military Sales activities are Legislated by the Foreign Assistance Act of 1961, as amended, and the Arms Export Control Act of 1976, as amended. The Truman Doctrine was the cornerstone for the development of the Foreign Assistance Act which provides the legal authority to provide goods and services to foreign governments which support U.S. national security objectives; and The Arms Export Control Act which authorizes foreign military sales to further U.S. security objectives and achieve mutual national defense requirements and objectives.

Foreign Military Sales as a Foreign Policy tool is not without its price. In 1993, Washington approved the shipment of \$2.2 billion in free, or "grant", weapons and military supplies to some 50 countries.<sup>14</sup> Many of these "give-aways" were to countries whose security interests are rooted in Cold War security arrangements or as reparations for participation or assistance in the Persian Gulf War. Specifically, Section 516 of the Foreign Assistance Act authorizes the grant transfer of lethal excess defense articles and services; 1) to those member countries of the North Atlantic Treaty Organization (NATO) on the southern flank of NATO; 2) to major non-NATO nations on the southern and southeastern flank of NATO; and 3) to those countries which contributed armed forces to deter Iraqi aggression in the Arabian Gulf.<sup>15</sup> This

section as originally written was intended to reinforce the weak southern flank of NATO in the early 1960's. Over the years, Section 516 has become a "catch-all" to reward countries for their favorable support of U.S. interests within a region. Other sections within the Foreign Assistance Act that grant U.S. military equipment to friendly nations include "Section 517 - The transfer of lethal Excess Defense Articles for the modernization of counter-narcotics capabilities of certain countries"; "Section 518 - The transfer of non-lethal Excess Defense Articles for the Protection of Natural Resources and Wildlife Management"; and "Section 519 - The transfer of non-lethal Excess Defense Articles to help modernize the defense capabilities of friendly countries."<sup>16</sup>

***Future FMS Guidance*** In early 1994, the Clinton Administration submitted to Congress a draft bill intended to replace the Foreign Assistance Act, cited as H.R. 3765 "*The Peace, Prosperity, and Democracy Act of 1994.*" The importance of alliances and coalitions remains evident given the language in Sections 3301 and 3302 of the bill:

*"In order to stem incipient regional conflicts worldwide, the United States sees great value in maintaining alliances, coalitions and other cooperative defense relationships that permit more effective collective defense efforts. The United States will provide assistance to enhance the ability of countries world wide willing to share the burden of contributing to regional alliances, coalition operations, and other collective security efforts to counter threats to and maintain international peace and security."*<sup>17</sup>

The overriding theme of this legislation is the promotion of democracy in Eastern Europe and the former Soviet Union through our national strategy of enlargement. As of October 1994, this bill was stalled in committee mark-up within the Senate Foreign Relations committee and the House Foreign Affairs committee. As an interim measure, in early November 1994, Congress

rushed through an amendment to the Foreign Assistance Act, entitled *The NATO Participation Act of 1994*, to assist in the transition to full NATO membership of some Partnership for Peace countries; specifically Poland, Hungary, the Czech Republic and the Slovakia.<sup>18</sup> These countries are now added to the list of countries eligible to receive U.S. Excess Defense Articles via grant under Section 516 of the Foreign Assistance Act.

*"It is the sense of Congress that in the interest of maintaining stability and promoting democracy in Poland, Hungary, the Czech Republic, Slovakia, and any other Partnership for Peace country designated under section 203(d) of this title, those countries should be included in all activities under section 2457 of title 10, United States Code, related to the increased standardization and enhanced interoperability of equipment and weapons systems through coordinated training and procurement activities, as well as other means, undertaken by the North Atlantic Treaty Organization members and other allied countries."*<sup>19</sup>

In addition to the above legislative guidance, the new United States Government Conventional Arms Transfer Policy, released by the White House on February 17, 1995, outlines the following goals for future arms sales: First, to ensure that our military forces can continue to enjoy technological advantages over potential adversaries; second, to help allies and friends deter or defend themselves against aggression, while promoting interoperability with U.S. forces when combined operations are required; third, to promote regional stability in areas critical to U.S. interests, while preventing the proliferation of weapons of mass destruction and their missile delivery systems; fourth, to promote peaceful conflict resolution and arms control, human rights, democratization, and other U.S. foreign policy objectives; and fifth, to enhance the ability of the



U.S. defense industrial base to meet U.S. defense requirements and maintain long-term military technological superiority at lower costs.<sup>20</sup>

Specifically with regards to the last point, "once an approval for a transfer is made, the United States will take such steps as tasking our overseas mission personnel to support overseas marketing efforts of American companies bidding on defense contracts, actively involving senior government officials in promoting sales of particular importance to the United States."<sup>21</sup> It is important to note that this new policy is similar to that of former President Reagan's export policy.

### **Alliance and Coalition Building**

Alliances are associations of nations, usually established in peacetime, with a stated purpose to be executed in war, of which NATO is the best known example.<sup>22</sup> Coalitions are short-notice wartime associations banded together to accomplish a specific wartime mission and are usually disbanded upon accomplishment of that task. The coalition organized under U.N. resolutions to ouster Iraq from Kuwait in 1991 is an excellent example of a coalition. Nations involve themselves in alliances and coalitions for a variety of reasons, mostly centered around the concept of power, international recognition, or prestige.<sup>23</sup> As a means of protection, nations enter into collective security arrangements to supplement each other's capabilities.<sup>24</sup>

The United States has been involved in coalition warfare since the Revolutionary War. Today, as throughout our history, multilateral cooperation is essential to address threats to U.S. national security, and "in most cases the United States will not act unilaterally."<sup>25</sup> The

Department of Defense's own Bottom Up Review and the subsequent Defense Planning Guidance establishes the basic U.S. military strategy for the foreseeable future as one that relies heavily on international engagement and coalition warfare.<sup>26</sup> Many of the alliances and coalitions formed to contain Soviet expansionism during the Cold War remain in effect and strong today as with NATO, the ANZUS Treaty, the RIO Treaty and the UN coalition in South Korea. As the lone military superpower and a world leader, the United States is committed to maintaining strong allies who share common military equipment, doctrine, and capabilities. This policy is articulated in the United States National Security Strategy, which states that:

*Through training programs, combined exercises, military contacts, interoperability and shared defense with potential coalition partners, as well as Security Assistance programs that include judicious foreign military sales, we can strengthen the self-defense capabilities of our friends and allies.<sup>27</sup>*

This is the basis upon which the USAF invites allies to participate in complex multi-aircraft exercises such as Red Flag, Blue Flag, Cope Thunder and the newly created Coalition Flag.

Prior to the Gulf War, exports of U.S. military equipment consisted primarily of our deactivated obsolete systems, retired from our own forces as we modernized. Most of this equipment was grant transferred under Section 516 (Southern Region Amendment) and Section 517 of the Foreign Assistance Act (countries and military forces engaged in counter-narcotic activities). While these grant transfers do not involve major financial transactions, they do provide several key advantages to the United States. First, they allow United States Government access and influence within the recipient counties and their respective regions; second, they ensure the U.S. forces maintain technological superiority; and third, U.S. defense industry

receives some limited business ventures through the sales of support equipment, logistical support, training and upgrade kits. Examples include grant transfers of F-4s, C-130s, tanks, ships and F-5s to Turkey, Egypt, Israel, and Greece; F-15s, F-4s, F-16s, tanks and weapons to Israel; and OV-10s to Colombia and Venezuela. Since the end of the Gulf War, Oman, the United Arab Emirates, Tunisia, Qatar, and Bahrain have been added to the list of Section 516 countries that are now eligible for grant transfers of excess U.S. defense articles as reparations for their support and assistance in the Gulf War coalition.<sup>28</sup>

Countries not eligible for grant transfers are eligible to purchase excess U.S. defense equipment at substantially lower prices than new equipment. Examples of these sales include; F-4s, C-130s, ships, helicopters and T-33s to Japan; F-4s, ships, helicopters, OV-10s, C-130s and F-5s to Korea; F-111s to Australia; and numerous aircraft (e.g. F-4s, OV-10s, A-4s, helicopters, tanks), miscellaneous equipment (e.g. radar stations, aircraft support equipment, vehicles, construction equipment) and munitions (e.g. bombs, missiles, artillery shells, bullets) to NATO countries such as Germany, the United Kingdom, Belgium, Norway, Denmark and the Netherlands.<sup>29</sup>

A major lesson learned during the Gulf War was that while most of the coalition partners possessed U.S. equipment, there still remained some severe incompatibilities. For instance, secure and anti-jam communications were not available to some allies -- causing battlefield communications problems and adding to the fog and friction of war. Some of the older U.S. equipment is not capable of delivering precision guided munitions or newer air-to-air missiles -- potentially creating a weak link in the coalition that the United States had to back-fill. And, numerous models and types of equipment require unique support equipment and spare parts --

logistical support is therefore increased, which tends to hamper interoperability and cross-servicing.

In addition, the United States provides the majority of the "speciality" missions such as aerial refueling, battlefield surveillance, air & missile defense, heavy airlift, anti-radiation missiles for suppression of enemy air defenses, night interdiction, stealth, electronic warfare and the employment of precision guided munitions. Therefore, the United States bore the brunt of the "speciality" missions and carried a heavier air tasking during the Gulf War. This heavy reliance on U.S. forces during the Persian Gulf War, when coupled with the known shortage of certain types of aircraft and munitions, helps to encourage the sales of new-production, state-of-the-art equipment to our coalition partners who will fight along side the United States and can therefore share a greater portion of the burden.

Another factor that supports foreign military sales of U.S. military equipment is the reduction in the overseas presence of U.S. forces. The defense drawdown coupled with governmental budget cutting measures and the end of the Cold War, the United States has reduced it's overseas military presence by as much as sixty-eight percent. As of September 30, 1993, U.S. military presence in Europe was down forty-nine percent from 344,078 troops in 1989 to 166,249 in 1993 and in the Pacific, total troop strength is down sixty-eight percent from a 1989 high of 146,026 to a total of 99,022 troops in 1993.<sup>30</sup> This is significant as measured, for example, by the increase in the time it takes the United States to respond to a crises. By arming our allies and partners with state-of-the-art military equipment and training, they are more capable of "holding an adversary" in place while the United States deploys our fighting forces from CONUS bases to the crises area. Additionally, common military and support equipment

within a host country greatly reduces our strategic lift requirements in the early days of a crises. This *de facto* forward presence assists in protecting our vital interests abroad as the United States military reduces it's force structure.

These reasons, combined with the desire to preserve the defense industrial base, serve as the impetus to modernize the military capabilities of our friends and allies with new-production, state-of-the-art, U.S-compatible equipment.

Critics of United States involvement in alliances and coalition warfare argue that military forces involved in coalitions must serve two masters: the interests of their nations and the interests of the coalition they support.<sup>31</sup> To satisfy the other members of the coalition or alliance, a nation must coordinate its actions with other members of the group often yielding to compromise; thus, forfeiting sovereignty over action. This requirement to compromise is more pronounced for the dominate power of the group, which has been the United States since World War II, who often makes concessions and compromises on decisions to maintain the integrity of the group. The commitment of the United States to the defeat of "Germany First" during World War II and the resulting assurance of the Allies that the focus of American planning and, more important, the priority of resources, would be oriented on the European Theater is just one example of this collaboration.<sup>32</sup> The efforts the United States made to keep Israel out of the Gulf War in response to the SCUD missile attacks, combined with United States efforts to integrate the Arab members of the Gulf War coalition into our command and control system, during Desert Storm provide recent examples of compromises that are necessary to hold a coalition together.

Opponents of selling state-of-the-art, new-production equipment overseas argue that we are reducing the technological superiority maintained by U.S. forces and are therefore, infringing

on the first goal of the government's new conventional arms transfer policy -- to ensure that our military forces continue to enjoy technological advantages over potential adversaries. They also stress the volatile nature of many of our allies' political allegiance by reminding us of Iran in 1979 and the loss of positive control of many of the stinger missiles sold to the Afghan rebels during their war with the Soviet Union.

These critics argue that we should not sell our best equipment overseas fearing that our own equipment could be turned against us as with the HAWK missiles captured by Iraq in Kuwait in 1990 and the HAWK missiles and F-14 aircraft in Iran in 1979. Sending arms abroad may in the end be counter productive. One observer of the U.S. arms trade argues that American arms are playing a role in 39 of the globe's 48 conflicts.<sup>33</sup> United States combat missions in Panama, Iraq, Somalia and Haiti were made more dangerous for U.S. soldiers, because "their opponents had received either weapons, training or military technology from the United States."<sup>34</sup> Many in the Pentagon express concerns about the consequences of some of these arms sales. As the world becomes more unstable in the multi-polar environment, U.S. troops are likely to face an increasing number of regional powers with relatively sophisticated weapons -- most of those weapons will have been made in America. Proponents of these arms sales counter this position with the argument that it is better to know the capabilities and limitations of the systems employed against you (e.g. something you or an ally produce) so that you can exploit known limitations than to be totally surprised by an enemy with unknown capabilities (e.g. just how good is the MIG-29 or the SU-27 ?). Additionally, they contend that the United States has some degree of control over countries operating U.S. produced military equipment.

## **Protecting and Preserving the Defense Industrial Base**

The biggest push to sell new-production equipment to our coalition partners and allies is derived primarily from two sources. First, the U.S. defense industry representatives are driven primarily by economics and self-preservation. The second is, the dependence on allied support to fight and win two "nearly simultaneous" major regional contingencies as defined by the Bottom Up Review.

United States officials say the sales foster good relations with other military forces, enable those countries to defend themselves better, and reduce the price of U.S. weapons by spreading the cost over bigger production runs. "We're pushing hard for overseas arms sales to make up for the shrinking U.S. military budget," confides an arms marketeer at a major defense contractor, "it's a matter of survival."<sup>35</sup>

A key element of the national security strategy of engagement and enlargement is to bolster America's economic revitalization. This effort is "premised on a belief that the line between our domestic and foreign policies has increasingly disappeared -- that we must revitalize our economy if we are to sustain our military forces, foreign initiatives and global influence, and that we must engage actively abroad if we are to open foreign markets and create jobs for our people."<sup>36</sup> Shortly after President Clinton took office, the State Department told U.S. embassies to push arms deals as if they were agricultural or pharmaceutical exports. "We will work with you to help you find buyers for your products in the world market place," Commerce Secretary Ron Brown told U.S. weapons makers in 1993," and then we will work to help you close the

deal."<sup>37</sup> That early direction is now formalized as the U.S. conventional arms transfer policy as described in an earlier section.

Since the beginning of the defense draw-down, the United States has cancelled or curtailed many of its own procurement initiatives, forcing defense industries to lay-off workers, while others abandon the defense business altogether. Several major defense contractors have taken advantage of government funding to make the transition from defense products to commercial products, while others have had to consolidate to remain viable. General Dynamics sold its fighter aircraft division to Lockheed; Northrop bought out the financially strapped Grumman Aircraft; and most recently, Lockheed and Martin-Marietta have merged. This is a significant event, since these mergers and conglomerates greatly reduce the number of vendors qualified to produce aircraft, especially fighter aircraft, for the Department of Defense. As the production base grows smaller, the competition becomes less, eventually resulting in an overall increase in price for the purchaser, simple supply and demand economics, -- in this case the American taxpayer. Even the latest merger between Lockheed and Martin-Marietta raised eyebrows within the U.S. Commerce Department of a possible anti-trust violation.

To maintain our technological superiority, many feel that the critical skills in the defense industrial base must be preserved, and since the United States is not buying, we must sell overseas to maintain our technical know-how and jobs. Secretary of Defense William Perry outlined seven initiatives to maintain the U.S. defense industrial base and those critical skills.

1) "We will maintain our defense technology base."<sup>38</sup> Even with drastic budget reductions, research & development (R&D) will continue with current funding levels at the



expense of the procurement budget. The United States will continue to develop and store new technologies for future use.

2) "We will procure defense unique items even if that product is not necessary in the quantities needed by the military forces."<sup>39</sup> While factories can be mothballed, the intellectual capital cannot. It can take years, or even decades, to rebuild the brain-power needed to build stealth aircraft or nuclear submarines; therefore, the cost of low-rate production is more acceptable than a loss of technological know-how.

3) "If we could convert a larger portion of our procurement to dual-use items, we would be able to sustain that portion of the defense industrial base, if we maintained a robust economy, with no special actions on the part of the Defense Department."<sup>40</sup> This initiative is driving the acquisition reform such as relaxing procurement regulations, military specifications, and security regulations.

4) "In order to sustain our defense industrial base, we need to embark on a major reform of the defense acquisition system."<sup>41</sup> Here he is talking about a major initiative to integrate the defense industrial base into the national industrial base. Details of this initiative have yet to be defined.

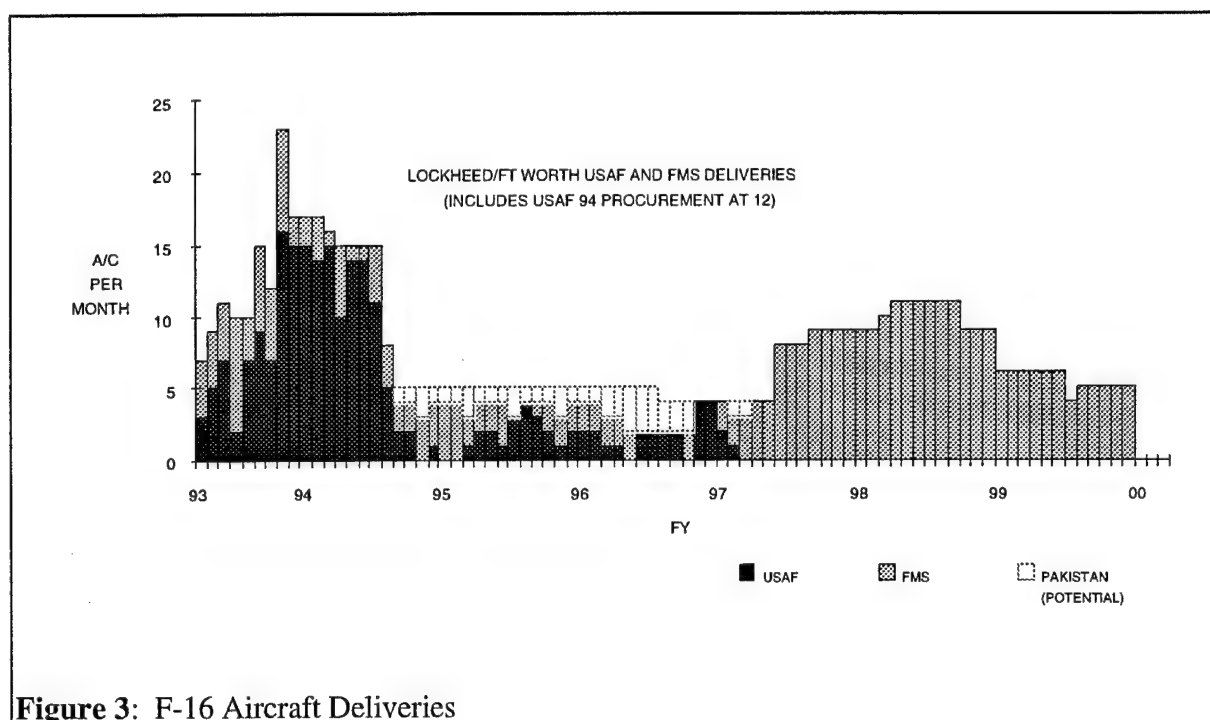
5) "We need to support and assist defense companies in their efforts to diversify."<sup>42</sup> The Defense Department is providing funding to assist defense industries in the development of dual-use technologies that can be used both in the Defense Department and the commercial world. Examples of these technologies might be the global positioning system, computer chips, and liquid crystal displays.

6) "The Defense Department must reduce our overhead in bases, depots and civilian personnel."<sup>43</sup> It is necessary to reduce this overhead in order to make funds available for forces and modernization programs. The military services have shrunk by approximately thirty percent, with little reduction in the infrastructure. The time has come to reduce the overhead.

7) "The government will assist U.S. companies in exporting their products across the world."<sup>44</sup> The governments new conventional arms transfer policy specifically addresses this point! In addition, the DoD can once again directly support international airshows on behalf of U.S. defense contractors.

Another senior official in the U.S. defense industry outlines three basic reasons why it is in the best interest of the United States to preserve the health of the defense industrial base. First, technology funded by the defense industries provides many commercial benefits from civilian airline development, to jet engine technologies, to microwave ovens, to global positioning systems, etc.<sup>45</sup> Second, the defense industrial base employs over 1.7 million Americans that we cannot afford to put on welfare or lose to foreign industry. Finally, if we allow the defense industry to shrink, we are risking the future security of our nation. We must continue to modernize and develop new systems as we did with stealth, precision guided munitions, and information systems. He stated, "that by delaying acquisitions and extending procurement schedules to save money today, we are actually creating a hollow force of modernization; therefore, sacrificing our readiness in the future and potentially increasing casualties in the future."<sup>46</sup>

The reality today is that many U.S. weapons now being built -- including most state-of-the-art F-15 and F-16 fighters, M-1 tanks and AH-64 helicopter gunships -- are bound for foreign customers, not the Pentagon. Presently, there are only two major defense contractors producing fighter aircraft in the U.S. -- Lockheed and McDonnell-Douglas. Foreign Military



Sales are the only sales keeping these two contractors in the fighter business. The last F-16 produced for the USAF will be delivered in 1997 (FY-94 procurement); however, Lockheed will continue producing F-16s for FMS countries through the turn of the century.<sup>47</sup> For McDonnell-Douglas, the USAF has already taken delivery of its last F-15E. Foreign procurements are also keeping that production line open through the turn of the century. Since these production lines are still "hot", the opportunity exists for the USAF to restart new production without exorbitant

start-up costs. As a matter of fact, the Air Force has requested funding in the FY-96 budget submission to purchase an additional 120 F-16Cs and 18-20 additional F-15Es to maintain 20 fighter wings past the year 2000.<sup>48</sup> This would not be financially feasible if FMS had not kept these production facilities active.

Keeping multiple defense contractors solvent and selling new-production equipment to our coalition partners and allies, over older less modern equipment, is important to the United States for several reasons. The first is competition. Multiple contractors encourage competition, which in turn yields the lowest price for an item. For instance, the competition between Hughes Missile Systems and Raytheon Missile Systems is one factor that contributed greatly to an AMRAAM missile price that is more than half the original cost of the missile built eight years ago.<sup>49</sup>

The other aspect of competition is that from international defense contractors. Our coalition partners and allies want and need modern fourth generation equipment. If they don't get it from the United States, they will get it from someone else. Sweden is building and exporting the JAS-39 Gripen; Russia the MIG-29 Fulcrum; and Germany, England, Spain and Italy the Eurofighter. Even though some of these countries are our close allies, their refusal to reveal detailed performance specifications about the systems they are building leaves their true capabilities and limitations uncertain.

The U.S. weapons-market share increase has come at the expense of its competitors. Between the four-year periods of 1986-89 and 1990-93, the value of Britain's exports shrank seventy-six percent, while Russian and Chinese exports fell sixty-eight percent.<sup>50</sup> But over the same time span, the value of United States contracts climbed 134 percent, according to recent

data.<sup>51</sup> The United States dominance stems from Russia's economic woes, which have eliminated the Pentagon's major arms-sale rival, and from the superior performance of U.S. weapons during the Gulf War. Our failure to offer our new equipment for sale while other countries are more than willing to sell their best could turn these numbers around in short order.

The second key reason to offer our new-production equipment for Foreign Military Sales is for economies-of-scale contracting, or spreading the cost over bigger production runs. The more you buy, the less each item costs! In addition to healthy contractor competition, the AMRAAM's price reduction is partly attributed to the combined contracting of U.S. and FMS missiles. Without the FMS quantities in FY-95 contracting actions, the United States would have recognized approximately a fifty-five percent per missile price increase based on a reduced quantity buy for the United States<sup>52</sup> As it turned out, the overall missile fly-away price dropped from \$299,000 in FY-94 to \$259,000 in FY-95 with 541 of the 1060 missiles contracted going to FMS countries.<sup>53</sup> As a result of this lower unit cost for the missile, the U.S. Air Force and the U.S. Navy combined will receive a total of 735 missiles for the price of 519 missiles, or an additional 216 missiles at no additional cost over what was originally budgeted.<sup>54</sup>

The third key reason to offer our new-production equipment for Foreign Military Sales is for coalition compatibility and burden sharing. Common equipment between ourselves and our allies allow us to work hand-in-hand without being totally dependent on any one state. In addition, commonality allows the United States, and other coalition nations, to travel to the crises area faster and lighter. It is not necessary to show up with a lot of support equipment or spare parts since the host country has an established supply and repair system for our common systems.

An established U.S. supply system in Saudi Arabia for the Saudi F-15s allowed the USAF to

respond to Iraqi aggression and deploy its F-15s to the desert quicker and with less initial logistical support equipment during the early days of Desert Shield. This equipment and logistical commonality and the ability to interoperate, freed-up much needed strategic airlift allowing additional combat forces to enter into the theater of operations during the early days of the crises.

Finally, there is the perception that by selling our allies the same equipment that we are buying, we are truly "partners". Many countries have expressed the feeling of being labeled a second class country when we refuse to sell our latest equipment. This in turn creates a feeling of distrust which ultimately affects our access and influence, and could cause a country to favor procurements from other countries thus, degrading interoperability within a coalition and adversely impacting the U.S. defense industrial base.

### **Is Industry Selling America's Security for Short Term Profits?**

Global arms competition continues to demand weapons with advanced technological capabilities. Defense contractors will try to meet this competition as they fight for arms contracts and market share. As seen in our discussion thus far, reduced domestic purchases have pushed defense firms to seek business abroad in order to remain a contender in the defense industry and supplement production costs. This business practice essentially reorients American defense industry towards the desires and goals of a foreign country's ambitions. Often those ambitions and goals demand a trade-off for purchasing foreign produced military equipment. These trade-offs take the form of offset agreements, coproduction, codevelopment, license production agreements and technology transfer. These reciprocal agreements often take work, technology, and dollars out of the United States.

Offsets are "compensatory, reciprocal trade agreements arranged as a condition of an export sale."<sup>55</sup> Normally, arms sales require direct offsets that allow the foreign country to participate directly in component production or final weapon assembly whereas indirect offsets agree to offer other goods or services, usually non-military, to the purchasing country in exchange for their weapons procurement. In this manner, foreign nations improve their overall economy by supporting their industry, creating jobs and learning a new or improved manufacturing process. An example of a direct offset would be an agreement to let a country build the components for a system they purchase. In an indirect offset, the U.S. contractor might agree to spend, for example, ninety-five cents on the dollar in the recipient country for every dollar they spend on the weapons procured. On recent high cost items, U.S. defense contractors have offered offset arrangements as high as one hundred percent.

Since 1990, virtually all FMS weapons sales involved economic offsets of some kind to the purchasing country.<sup>56</sup> These offsets provide the impetus for foreign governments to enter into U.S. contracts, as they are courted by arms competitors from other countries. The decision whether to engage in offsets, and the responsibility for negotiating and implementing offset arrangements resides with the defense firm involved. The U.S. government is restricted under the 1989 National Defense Authorization Act from encouraging foreign nations, committing U.S. assets or participating in offset arrangements involving defense goods and services.

Globally, the 1990s have seen a tremendous increase in the coproduction/codevelopment programs established by the arms industry. Coproduction involves a joint manufacturing venture between the U.S. defense firm and the participating nation(s). The F-16 fighter represents the largest coproduction venture in this century, with four participating Western European countries

(Belgium, Denmark, the Netherlands and Norway).<sup>57</sup> Under coproduction, participating nations are authorized to produce portions of the product but are not entitled to have access to critical manufacturing processes or technologies.

On the positive side, coproduction can lock foreign governments into business arrangements for several decades, from program start to finish. This facet of coproduction provides three major advantages for U.S. defense firms. First, it establishes a secure business base by reducing company production costs with guaranteed revenues. Second, it bolsters other market sales as foreign governments have confidence in a product bought by many. Third, the decades of defense interaction with the participating government establishes a diplomatic tradition that assists in future sales.

The terms of coproduction can usually be negotiated with minimal U.S. government involvement; however, this is not true of codeveloped weapons programs. In codevelopment programs, "governments or multinational corporate teams work together to jointly develop and manufacture a weapon system. Codevelopment usually entails cooperation from the concept evaluation stage through production, and thus involves cost and benefit-sharing throughout a weapon system's life-cycle."<sup>58</sup> Unfortunately, as in the very nature of coalitions, it also involves compromise.

Codevelopment methods of weapon system procurement are not as prevalent in the U.S. as they are in Europe. The predominate reason is the extended program length and management difficulties of the U.S. acquisition system. Still, with the high cost of R&D today, many European countries prefer to participate in codevelopment ventures with the United States as in the AMRAAM/ASRAAM agreement between the United States, Great Britain and Germany.



This agreement was cancelled after participants failed to agree on a final design to match their individual military requirements. This dilemma manifests itself in the large contingent of multinational managers who implement program execution. The European Tornado fighter, a codeveloped project between the British, Italians and Germans, took over 15 years and \$7 billion dollars to complete; almost twice as long and three times as much as the F-16 program.<sup>59</sup> The current Eurofighter 2000 venture between Great Britain, Germany, Spain, and Italy is experiencing similar delays and cost overruns.

The U.S. military services along with their respective defense firms enjoy the freedom of action derived from being the sole decision maker. Individual U.S. defense firms prefer the autonomy of being the single source contractor, and the benefits and profits obtained from it. Program managers do not want the headaches of managing multi-national development projects that are often diluted via compromise.

Two other categories of offsets often required to "culminate the deal" with a prospective country include the requirement to license produce an item or the requirement for technology transfer. The requirement to license produce usually stems from the desire to be totally independent and/or the need to create jobs within ones own country. License production is usually more expensive than purchasing the end item from the manufacturer but in some countries it is the preferred method since it provides both jobs and technology transfer. This is the case in Japan where the Japanese are license producing the F-15 from McDonnell-Douglas, AIM-7 missiles from Raytheon and F-15 radars from Hughes Aircraft.

Recently, an alarming number of countries has required either technology transfer or license production of previously unreleased technologies before they would agree to purchase

from a U.S. contractor. Before agreeing on the F-16 in the KFP, the government of Korea required not only aircraft production within South Korea but also the capability to manipulate the aircraft's software via a software maintenance facility. Until this case, software source code and the training required to manipulate this software has always been a highly controlled technology by the United States government. In 1994, Singapore held out for an agreement to transfer the technology to build the hot section components of advanced jet engines and a software facility before signing the contract for their latest purchase of F-16s.

If our defense technology base is the key to our defense industrial base, we can no longer afford to sell the "family jewels" for immediate profit. In addition, if we continue to sell all the design and manufacturing technology through license agreements, we limit our ability to control the total number of items a country produces, who they sell those items to, or by what rules they play by.

### **Conclusion**

The apparent shift in United States Government policy to sell more high-technology military equipment is a function of necessity, because of our increased reliance on our coalition partners and allies in future crises, and of our need to preserve our high-technology defense industrial base. Thus, the objective of current United States Government Foreign Military Sales practices are both to support the defense industrial base and build effective coalitions with maximum interoperability.

Caution must be exercised to avoid allowing nations to modify their systems as this breaks down the system commonalities and the capability for interoperability. While it is

important for US defense industries to compete globally, we must exercise caution and restraint so as not to create additional competition and economic rivalries. "The struggle to reshape the world economy in the post Cold War environment may well replace the old causes on inter-state rivalries to become the central axis of international politics. If so, economic strife could become the ingredient that transforms spreading multipolarity and proliferating military technology into an explosive mixture. Economics will have a major bearing on the degree to which the world is a peaceful or dangerous place. To the extent that economic relationships are cooperative, prospects for stability will be enhanced, but if these relationships become conflictual, security crises might become common fare.<sup>60</sup>

The realist view in international politics argues that nations do what they do for two basic reasons -- power and influence. Power is represented in both the alliance and coalition building argument and in the protection of America's defense industry argument through enhanced military capability, whether multi-lateral or unilateral, and economic stability. Granted, there is more emphasis today to sell new high-technology military equipment overseas, both to maintain the defense industrial base and to insure our allies are adequately equipped to support a coalition. Still, underlying all FMS transactions is the U.S. Government's influence over the recipient countries and the impact to the regional balance of power resulting from any and all sales.

The Cold War may be over, but the need for American leadership abroad remains as strong as ever. Controlled and prudent foreign military sales initiatives allows us the opportunity to exercise our leadership role. We must exercise caution and not let our quest to preserve the defense industrial base today sell our position of leadership abroad.

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